ASG-Insight™
Installation Guide

Version: 6.0
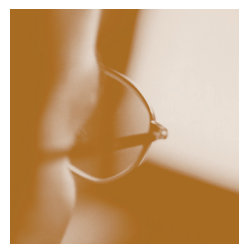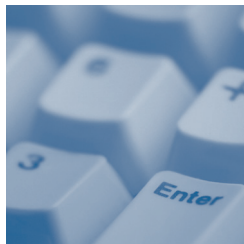
Publication Number: INX0300-60

Publication Date: February 2002

ASG Documentation/Product Enhancement Fax Form

Please FAX comments regarding ASG products and/or documentation to (941) 263-3692.

Company Name	Telephone Number	Site ID	Contact name

Product Name/Publication	Version #	Publication Date
Product:		
Publication:		
Tape VOLSER:		

Enhancement Request:

ASG Support Numbers

ASG provides support throughout the world to resolve questions or problems regarding installation, operation, or use of our products. We provide all levels of support during normal business hours and emergency support during non-business hours. To expedite response time, please follow these procedures.

Please have this information ready:

- Product name, version number, and release number

- List of any fixes currently applied

- Any alphanumeric error codes or messages written precisely or displayed

- A description of the specific steps that immediately preceded the problem

- The severity code (ASG Support uses an escalated severity system to prioritize service to our clients. The severity codes and their meanings are listed below.)

- Verify whether you received an ASG Service Pack for this product. It may include information to help you resolve questions regarding installation of this ASG product. The Service Pack instructions are in a text file on the distribution media included with the Service Pack.

If You Receive a Voice Mail Message:

1 Follow the instructions to report a production-down or critical problem.

2 Leave a detailed message including your name and phone number. A Support representative will be paged and will return your call as soon as possible.

3 Please have the information described above ready for when you are contacted by the Support representative.

Severity Codes and Expected Support Response Times

Severity	Meaning	Expected Support Response Time
1	Production down, critical situation	Within 30 minutes
2	Major component of product disabled	Within 2 hours
3	Problem with the product, but customer has work-around solution	Within 4 hours
4	"How-to" questions and enhancement requests	Within 4 hours

ASG provides software products that run in a number of third-party vendor environments. Support for all non-ASG products is the responsibility of the respective vendor. In the event a vendor discontinues support for a hardware and/or software product, ASG cannot be held responsible for problems arising from the use of that unsupported version.

Business Hours Support

Your Location	Phone	Fax	E-mail
United States and Canada	800.354.3578	941.263.2883	support@asg.com
Australia	61.2.9460.0411	61.2.9460.0280	support.au@asg.com
England	44.1727.736305	44.1727.812018	support.uk@asg.com
France	33.141.028590	33.141.028589	support.fr@asg.com
Germany	49.89.45716.300	49.89.45716.400	support.de@asg.com
Singapore	65.332.2922	65.337.7228	support.sg@asg.com
All other countries:	1.941.435.2200		support@asg.com

Non-Business Hours - Emergency Support

Your Location	Phone	Your Location	Phone
United States and Canada	800.354.3578		
Asia	65.332.2922	**Japan/Telecom**	0041.800.9932.5536
Australia	0011.800.9932.5536	**Netherlands**	00.800.3354.3578
Denmark	00.800.9932.5536	**New Zealand**	00.800.9932.5536
France	00.800.3354.3578	**Singapore**	001.800.3354.3578
Germany	00.800.3354.3578	**South Korea**	001.800.9932.5536
Hong Kong	001.800.9932.5536	**Sweden/Telia**	009.800.9932.5536
Ireland	00.800.9932.5536	**Switzerland**	00.800.9932.5536
Israel/Bezeq	014.800.9932.5536	**Thailand**	001.800.9932.5536
Japan/IDC	0061.800.9932.5536	**United Kingdom**	00.800.3354.3578
		All other countries	1.941.435.2200

ASG Web Site

Visit http://www.asg.com, ASG's World Wide Web site.

Submit all product and documentation suggestions to ASG's product management team at http://www.asg.com/asp/emailproductsuggestions.asp.

If you do not have access to the web, FAX your suggestions to product management at (941) 263-3692. Please include your name, company, work phone, e-mail ID, and the name of the ASG product you are using. For documentation suggestions include the publication number located on the publication's front cover.

Contents

Preface

This *ASG-Insight Installation Guide* provides a guide for the customization of ASG-Insight (herein called Insight). Insight is a powerful interactive system that helps programmers by automating the process of analyzing COBOL programs.

Allen Systems Group, Inc. (ASG) provides professional support to resolve any questions or concerns regarding the installation or use of any ASG product. Telephone technical support is available around the world, 24 hours a day, 7 days a week.

ASG welcomes your comments, as a preferred or prospective customer, on this publication or on any ASG product.

About this Publication

This publication consists of these chapters:

- Chapter 1, "Introduction," describes the features and benefits of using Insight, as well as the operating environment.

- Chapter 2, "Insight Customization," describes the Insight customization process.

Related Publications

The documentation library for ASG-Insight consists of these publications (where *nn* represents the product version number):

- *ASG-Center Installation Guide* (CNX0300-*nn*) contains installation and maintenance information for ASG-Center, the common set of libraries shared by the ASG-Existing Systems Workbench (ESW) suite of products.

- *ASG-Insight Installation Guide* (INX0300-*nn*) provides instruction about the installation and maintenance of ASG-Insight.

- *ASG-Insight Quick Reference Card* (INX0900-*nn*) provides a summary of the commands and functions within ASG-Insight.

- *ASG-Insight Quick Reference Guide* (INX0600-*nn*) summarizes the syntax and use of ASG-Insight commands.

- *ASG-Insight Reference Guide* (INX0400-*nn*) provides detailed information about the pop-ups, screens, and commands used in ASG-Insight, including field descriptions, usage notes, and command syntax.

- *ASG-Insight User's Guide* (INX0200-*nn*) provides user information for ASG-Insight.
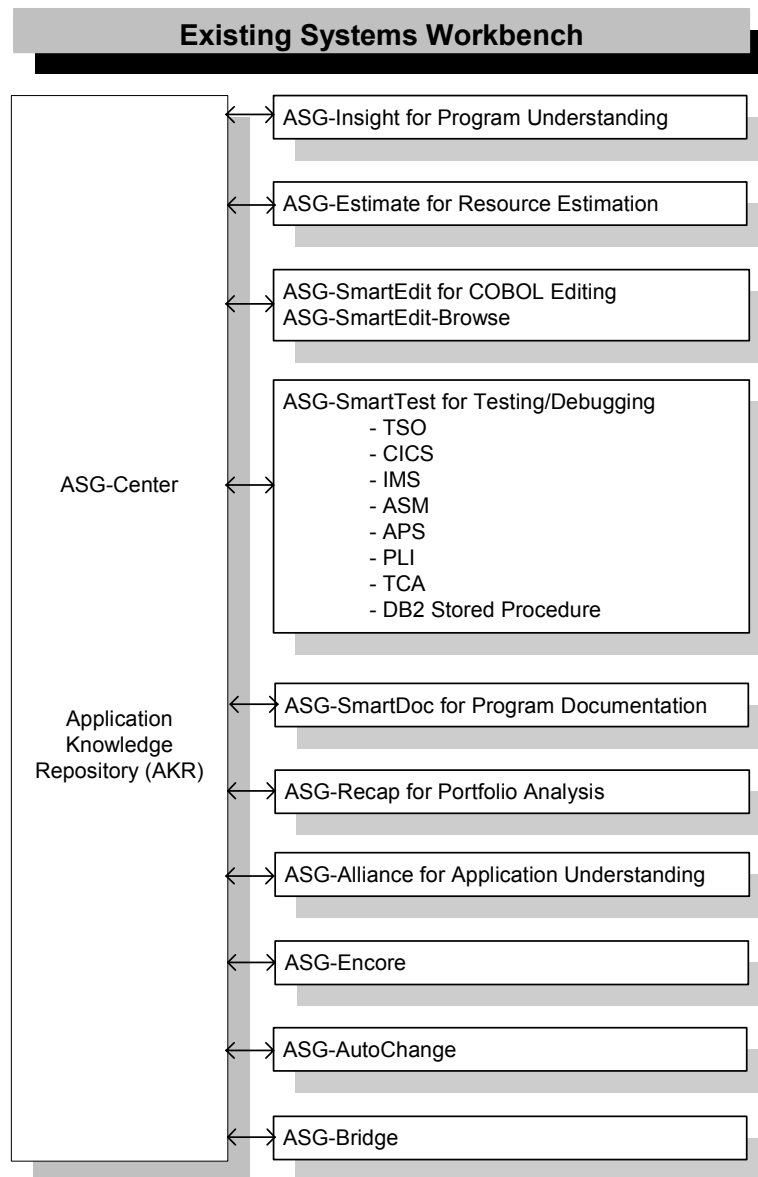
Note:

To obtain a specific version of a publication, contact the ASG Service Desk.

ASG-Existing Systems Workbench (ASG-ESW)

ASG-ESW (herein called ESW) is an integrated suite of components designed to assist organizations in enhancing, redeveloping, or re-engineering their existing systems. ESW products use the Application Knowledge Repository (AKR) to store source program analysis information generated by the Analytical Engine. Figure 1 represents the components of ESW.

Figure 1 • ASG Existing Systems Workbench

Existing Systems Workbench

ASG-Center	ASG-Insight for Program Understanding
	ASG-Estimate for Resource Estimation
	ASG-SmartEdit for COBOL Editing ASG-SmartEdit-Browse
	ASG-SmartTest for Testing/Debugging - TSO - CICS - IMS - ASM - APS - PLI - TCA - DB2 Stored Procedure
Application Knowledge Repository (AKR)	ASG-SmartDoc for Program Documentation
	ASG-Recap for Portfolio Analysis
	ASG-Alliance for Application Understanding
	ASG-Encore
	ASG-AutoChange
	ASG-Bridge

This table contains the name and description of each ESW component:

ESW Product	Herein Called	Description
ASG-Alliance	Alliance	The application understanding component that is used by IT professionals to conduct an analysis of every application in their environment. Alliance supports the analysis and assessment of the impact of change requests upon an entire application. Alliance allows the programmer/analyst to accurately perform application analysis tasks in a fraction of the time it would take to perform these tasks without an automated analysis tool. The impact analysis from Alliance provides application management with additional information for use in determining the resources required for application changes.
ASG-AutoChange	AutoChange	The COBOL code change tool that makes conversion teams more productive by enabling quick and safe changes to be made to large quantities of code. AutoChange is an interactive tool that guides the user through the process of making source code changes.
ASG-Bridge	Bridge	The bridging product that enables field expansion for program source code, without being required to simultaneously expand the fields in files or databases. Because programs are converted in smaller groups, or on a one-by-one basis, and do not require file conversion, testing during the conversion process is simpler and more thorough.
ASG-Center	Center	The common platform for all ESW products. Center provides the common Analytical Engine to analyze the source program and store this information in the AKR. This common platform provides a homogeneous environment for all ESW products to work synergistically.

ESW Product	Herein Called	Description
ASG-Encore	Encore	The program re-engineering component for COBOL programs. Encore includes analysis facilities and allows you to extract code based on the most frequently used re-engineering criteria. The code generation facilities allow you to use the results of the extract to generate a standalone program, a callable module, a complement module, and a CICS server. Prior to code generation, you can view and modify the extracted Logic Segment using the COBOL editor.
ASG-Estimate	Estimate	The resource estimation tool that enables the user to define the scope, determine the impact, and estimate the cost of code conversion for COBOL, Assembler, and PL/I programs. Estimate locates selected data items across an application and determines how they are used (moves, arithmetic operations, and compares). Time and cost factors are applied to these counts, generating cost and personnel resource estimates.
ASG-Insight	Insight	The program understanding component for COBOL programs. Insight allows programmers to expose program structure, identify data flow, find program anomalies, and trace logic paths. It also has automated procedures to assist in debugging program abends, changing a computation, and resolving incorrect program output values.
ASG-Recap	Recap	The portfolio analysis component that evaluates COBOL applications. Recap reports provide function point analysis and metrics information, program quality assessments, intra-application and inter-application comparisons and summaries, and historical reporting of function point and metrics information. The portfolio analysis information can also be viewed interactively or exported to a database, spreadsheet, or graphics package.
ASG-SmartDoc	SmartDoc	The program documentation component for COBOL programs. SmartDoc reports contain control and data flow information, an annotated source listing, structure charts, program summary reports, exception reports for program anomalies, and software metrics.

ESW Product	Herein Called	Description
ASG-SmartEdit	SmartEdit	The COBOL editing component that can be activated automatically when the ISPF/PDF Editor is invoked. SmartEdit provides comprehensive searching, inline copybook display, and syntax checking. SmartEdit allows you to include an additional preprocessor (for example, the APS generator) during syntax checking. SmartEdit supports all versions of IBM COBOL, CICS, SQL, and CA-IDMS.
ASG-SmartTest	SmartTest	The testing/debugging component for COBOL, PL/I, Assembler, and APS programs in the TSO, MVS Batch, CICS (including file services), and IMS environments. SmartTest features include program analysis commands, execution control, intelligent breakpoints, test coverage, pseudo code with COBOL source update, batch connect, disassembled object code support, and full screen memory display.

Invoking ESW Products

The method you use to invoke an ESW product depends on your system setup. If you need assistance to activate a product, see your systems administrator. If your site starts a product directly, use the ISPF selection or CLIST as indicated by your systems administrator. If your site uses the ESW screen to start a product, initiate the ESW screen using the ISPF selection or CLIST as indicated by your systems administrator and then typing in the product command on the command line.

The product names can also vary depending on whether you access a product directly or through ESW. See for more information about using ESW.

To initialize ESW products from the main ESW screen, select the appropriate option on the action bar pull-downs or type the product shortcut on the command line.

Product Name	Shortcut	ESW Pull-down Options
Alliance	AL	Understand ▶ Application
AutoChange	CC	Change ▶ Conversion Set
Bridge	BR	Change ▶ ASG-Bridge
Encore (Re-engineer)	EN	Re-engineer ▶ Program
Estimate	ES	Measure ▶ ASG-Estimate
Insight (Understand)	IN	Understand ▶ Program
Recap (Portfolio Analysis)	RC	Measure ▶ Portfolio
SmartDoc (Document)	DC	Document ▶ Program
SmartEdit	SE	Change ▶ Program **Or** Change ▶ Program with Options
SmartTest	ST	Test ▶ Module/Transaction

ESW Product Integration

Because ESW is an integrated suite of products, you are able to access individual ESW products directly or through the main ESW screen. As a result, you might see different fields, values, action bar options, and pull-down options on a screen or pop-up depending on how you accessed the screen or pop-up.

Certain ESW products also contain functionality that interfaces with other ESW products. Using SmartTest as an example, if Alliance is installed, SmartTest provides a dynamic link to Alliance that can be used to display program analysis information. If Insight is installed and specified during the analyze, the Insight program analysis functions are automatically available for viewing logic/data relationships and execution path. For example, the Scratchpad option is available on the Options pull-down if you have Insight installed. Access to these integrated products requires only that they be installed and executed in the same libraries.

Examples

Example 1. Figure 2 shows the Encore Primary screen that displays when you access Encore directly.

The Encore Primary screen contains these eight action bar menu items: File, View, Extract, Generate, Search, List, Options, and Help.

Figure 2 • Encore Primary Screen

Figure 3 shows the Encore Primary screen that displays when you access Encore through ESW by selecting Re-engineer ▶ Program from the ESW action bar menu. Notice that the Primary screen name changes to ASG-ESW - Program Re-engineering when you enter Encore through ESW. Also, the Logic menu item displays if Insight is installed.

Figure 3 • ESW Encore Primary Screen

Example 2. Figure 4 shows the File - Analyze Submit pop-up that displays when you access SmartTest directly. Figure 5 shows the File - Analyze Submit pop-up that displays when you access SmartTest through ESW.

Notice that the Analyze features field in Figure 5 lists additional ESW products than shown on Figure 4. This field is automatically customized to contain the ESW products you have installed on your system.

The actions shown on these screens also vary. For example, the D action (ASG-SmartDoc Options) is available on the File - Analyze Submit screen if the SmartDoc product is installed on your system. In Figure 4, the ASG-SmartDoc Options action is not available.

Figure 4 •   File - Analyze Submit Screen

```
                         File - Analyze Submit
    Command ===> _____

              E - Edit JCL                          S - Submit JCL

    Compile and link JCL (PDS or sequential):
       Data set name  'USER12.REL.CNTL(VIAPCOBC)'

    Analyze features (Y/N):
       ASG-SmartTest:  Y   Extended Analysis:  N

    AKR data set name 'USER12.GENERAL.AKR'
    AKR program name                        (if overriding PROGRAM-ID)

    Analyze options:

       _____
       _____
       _____

    Compile? (Y/N) . . . . . . . . . Y    (Y if needed by features)
    Link load module reusable? (Y/N) Y
```

Figure 5 •   File - Analyze Submit Screen (Accessed through ESW)

```
                         File - Analyze Submit
    Command ===> _____

              E - Edit JCL     S - Submit JCL     D - ASG-SmartDoc Options

    Compile and link JCL (PDS or sequential):
       Data set name  'USER12.REL.CNTL(HTEST)'

    Analyze features (Y/N):
       ASG-Insight:  Y   ASG-SmartTest:  Y   Extended Analysis:  N
       ASG-SmartDoc:  N    ASG-Encore:  N
    AKR data set name 'USER12.GENERAL.AKR'
    AKR program name  _____          (if overriding PROGRAM-ID)

    Analyze options:

       _____
       _____
       _____

    Compile? (Y/N) . . . . . . . . . Y    (Y if needed by features)
    Link load module reusable? (Y/N) Y    (ASG-SmartTest
```

Publication Conventions

ASG uses these conventions in technical publications:

Convention	Represents
ALL CAPITALS	Directory, path, file, dataset, member, database, program, command, and parameter names.
Initial Capitals on Each Word	Window, field, field group, check box, button, screen, option names, and names of keys. A plus sign (+) is inserted for key combinations (e.g., Alt+Tab).
lowercase italic monospace	Information that you provide according to your particular situation. For example, you would replace *filename* with the actual name of the file.
Monospace	Characters you must type exactly as they are shown. Code, JCL, file listings, or command/statement syntax. Also used for denoting brief examples in a paragraph.
Vertical Separator Bar (|) with underline	Options available with the default value underlined (e.g., Y|<u>N</u>).

1

Introduction

This chapter provides an introduction to Insight and includes these sections:

Note:

Installation and customization of Center must be performed before installing Insight. If Center has not been installed, see the *ASG-Center Installation Guide* at this time.

ASG Service Pack

Verify whether you received an ASG Service Pack for this product. If so, read the instructions for installing the Service Pack before proceeding with the product installation. The installation instructions are located in a text file on the distribution media included with the Service Pack. If you have any problems with the Service Pack, contact the ASG Service Desk.

Overview

Insight is the first online technology that analyzes COBOL programs using IBM's TSO/ISPF systems. It is an electronic window through which you gain insight into the workings of a COBOL program. Powerful Insight facilities provide a precise, consistent, and thorough analysis of COBOL source code. You no longer need to summarize information from source listings, cross-references, and primitive online browse facilities. Insight automates each task, yet blends them with your current maintenance practices. You can determine what information you want and when you want it. You can also direct whether an overview or the details of a program are displayed. Insight reduces the time spent trying to understanding programs by half.

Using Insight is a simple two-step process. First, run the Program Analyzer (a batch job), to perform the detailed analysis of a COBOL program. The results are stored in the AKR. Second, open the program in Insight, that provides online access to the analyzed program in the AKR.

Benefits

Insight offers COBOL programmers unprecedented speed and accuracy while analyzing source code.

You can get an overview of either structured or unstructured programs with Insight's flexible options. Insight also offers online access to complete data cross-reference, through an action bar selection or with a single command. Its references include automatic checks for group level and redefined datanames. In addition, it retains the results for further evaluation with other commands.

Insight reduces effort, eliminates oversights, and saves time.

Efficiency. You save time because you do not manually collect information from limited listings and browse facilities. With Insight, an action bar selection or command evaluates your program and presents concise results.

All maintenance and enhancement activities may be done without leaving Insight. Using the powerful online facilities in Source View, you can analyze the source code and determine what changes need to be made. You can then link to the editor to view the identified lines and make the changes.

Accuracy. The Insight analysis is accurate. It consistently and precisely evaluates COBOL source code.

Usability. The easy to use CUA screens, pull-downs, and pop-ups Insight offers eliminate your need to search and summarize program listings. Results are summarized in screen formats that prepare you for your next query.

Accessibility. Insight is at your fingertips. It is integrated into your daily TSO/ISPF work environment and supplies useful help facilities.

Focus. Insight manages technical details so you can focus on understanding programs and assessing your changes.

Understandability. Insight pull-downs, pop-ups, and commands help to automate each task you need to learn a program. Any COBOL program characteristic is easily revealed through pop-ups or Insight commands. The resulting analysis is presented clearly, when and where it is needed.

Insight Features

Insight performs these functions to help you understand program structure:

- Determining program structure

- Identifying data usage and relationships

- Tracing data usage in logic

- Tracing logic flow

- Saving, reusing, and printing information

Insight is part of an integrated family of products that support the automation of the software maintenance cycle.

Operating Environment

Insight requires:

- MVS/XA, MVS/ESA, and OS/390

- MVS ISPF Version 3.1 or later

- VSAM (or sequential file) for the ASG AKR

- BATCH region size of 4096K or larger

- TSO logon region size: 2048K or larger

- Storage above the 16M line is used for load modules and GETMAINs

- Direct access storage

    Note:

    See the *ASG-Center Installation Guide* for the quantities.

- 3270 type terminals; Models 2, 3, 4, or 5

COBOL Support

Insight supports these COBOL compilers:

- COBOL II (including releases 3 and 4)

- COBOL/370

- COBOL D, E, and F

- COBOL for MVS and VM

- ANSI COBOL

- CASE Generated COBOL

Preprocessor Support

Insight supports these preprocessor languages directly:

- Command Level CICS

- Command Level DL/I

- IDMS

- SQL

Other preprocessed languages can be supported from the generated COBOL code.

2   Insight Customization

This chapter describes how to install and customize Insight, and contains these sections:

Prerequisite

Center installation and customization must be performed before customizing Insight. If Center has not been installed, see the *ASG-Center Installation Guide* at this time.

Modifying CNTL Library Members

At this time, modify the members in this table but do not execute them. These members are used to compile and analyze Insight demonstration programs. In each of the members listed below, specify the correct values for these parameters:

Parameter	Value
VIASOFT	Specify the high-level node where the ESW products are installed.
CENTER	Specify the second-level node where ESW products are installed. If the ESW dataset names contain more than three nodes, specify all nodes except the first and the last as CENTER. For example, the dataset name of SYS3.CENxx.NEW.LOADLIB should have VIASOFT=SYS3 and CENTER=CENxx.NEW.
SYSOUT	Specify the correct SYSOUT character.
SYSDA	Specify the appropriate UNIT for temporary datasets.
COMPILER	Specify the COBOL compiler load module name.
COBCOMP	Specify the COBOL compiler load library name.

Edit these members, specify a valid JOB card, and specify the correct values for the above parameters.

Member	Description
VIAICMP1	JCL to compile (VS COBOL) and analyze demonstration programs.
VIAICMP2	JCL to compile (COBOL II) and analyze demonstration programs.
VIAICMP3	JCL to compile (COBOL II Release 3) and analyze demonstration programs.

Adding the Insight Load Module to MLPA/PLPA

The Insight load module VIAIMAIN is re-entrant and is available for location in Extended LPA. Some advantages of this are:

- A reduction of the memory requirement per user.

- An overall decrease in required swap space.

- Performance improvements.

Moving this module to MLPA/PLPA is optional. It is recommended that you keep the original ESW load library (from the installation tape) as a staging library so that you can easily apply any required PTFs. Copy the re-entrant modules to Extended LPA and the non-reentrant modules to a separate user library. These steps also require changes to the user's logon or product allocations. Use CNTL library members VIASLPAJ and VIASLPXJ, to perform the copy steps.

Note:

Do not use the ISPF copy feature to copy these modules because some of them have aliases.

Customizing Panvalet, Librarian, or User Source Manager

Panvalet Customization

To customize Panvalet

Note:

Do not perform this step if you are using Panvalet R12 or above and the module PAM is available in LINKLST or LPA.

1   Edit the VIASPAMJ CNTL member. Specify a valid JOB card and enter the correct values for the VIASOFT, ASMBLR, CENTER, PANLIB, SYSOUT, and SYSDA parameters.

2   Submit this job to assemble and link-edit the Panvalet VIASPAM module.

3   If your site has modified Panvalet's customized edit screen, you may need to include changes in the screens VSPENPAN, VSPE2PAN, and VSPEDPAN. If this situation occurs, contact the ASG Service Desk for instructions.

If the Panvalet load library is allocated under ISPLLIB and you use the LIBDEF facility, `MEMBER NOT FOUND` warning messages display each time you select a Panvalet member. These are the possible alternatives:

- Add Insight allocations to LOGON and bypass LIBDEF processing.

- Add the Panvalet load library allocation to VIALLIB in LIBDEF processing.

- Set WTPMSG OFF (not recommended).

Librarian Customization

To customize Librarian

1 Edit the VIASFAIJ CNTL member. Specify a valid JOB card and enter the correct values for the VIASOFT, ASMBLR, CENTER, LIBRLIB, LIBRMAC, SYSOUT, and SYSDA parameters. If you are using Librarian R3.9, edit VIASFAIR. Comment out the five lines containing these delete statements:

```
DELETE EPLOC=XFAIROPN
DELETE EPLOC=XFAIRMOD
DELETE EPLOC=XFAIRREC
DELETE EPLOC=XFAIRLOC
DELETE EPLOC=XFAIRCLS
```

2 Submit this job to assemble and link-edit the Librarian VIASFAIR module.

3 If your site has modified Librarian's customized edit screen, contact the ASG Service Desk for instructions. You may need to include the changes in the screens VSPENLIB, VSPEDLIB, and VSPE2LIB.

If the Librarian load library is allocated under ISPLLIB and you use the LIBDEF facility, `MEMBER NOT FOUND` warning messages display each time you select a Librarian member. Alternatives include:

- Add Insight allocations to LOGON and bypass LIBDEF processing.

- Add the Librarian load library allocation to VIALLIB in LIBDEF processing.

- Set WTPMSG OFF (not recommended).

Other Source Managers Customization

To support user developed or other vendor developed source managers

1   Modify the distributed CLIST VIAEDUSR according to the instructions in the CLIST. VIAEDUSR is invoked when you select the Other (User) Source Manager option from the Options - COPY/Include Libraries screen. The screens that you may need to customize are VSPEDUSR, VSPE2USR, and VSPENUSR.

2   Change the Options - COPY/Include Libraries screen (VEPEOPTS) to reflect the alternate source manager and dataset or member names used.

Starting Insight

Note: ————————————————

Skip this step if the ESW product menu is installed.

To invoke Insight from an ISPF screen

Use these screen definition cards to add an Insight option on either the ISPF primary menu or other dialog menu.

Use this statement to describe the Insight option to the user:

```
% I +ASG Insight - Interactive Source Code Analyzer
```

Use this statement to invoke Insight based on the user selection of the letter I:

```
I, `CMD(%INSIGHT) NEWAPPL(VIAI)'
```

Note: ————————————————

After you update the ISPF environment you may need to re-enter ISPF before the facilities are available.

To invoke Insight with a CLIST, follow this step:

▸ Type `TSO VIAINS` on the command line in the ESW primary screen. The VIAINS CLIST invokes the INSIGHT CLIST while specifying the NEWAPPL(VIAI) parameter to set the correct application ID.

Validating Insight

To verify that the installation completed successfully, perform these functions. An installation checkout form is provided in the appendix to assist you with installation.

Note:
The dataset names used in these validation steps are the default installation names. If you have changed them, use the new names in place of the default names.

To test the logon library allocations

1 Start Insight by selecting the correct option from the Menu.

> **Note:**
> If you invoked Insight as indicated in "To invoke Insight with a CLIST, follow this step:" on page 9, use the appropriate selection on the ISPF menu or execute the CLIST. If you installed the ESW product menu as described in the *ASG-Center Installation Guide*, use the appropriate ISPF menu selection or the CLIST to display the ESW product primary screen. Select Understand ▶ Program to display the Insight primary screen. If you use the ESW product primary screen to start Insight, the product name displays as ESW - Program Understanding.

2 Select Help ▶ About.

This allows you to verify the product release and level of Insight that has been installed. The product name, product release number, product maintenance level, and operating system are indicated.

Press PF3/15 to remove the Help - About pop-up.

3 Review and/or modify Insight options by selecting Options on the action bar. The Options pull-down displays.

a Select Options ▶ Product parameters. The Options - Product Parameters pop-up displays.

b Review and/or modify the parameter definitions and press PF3/15.

c Select Options ▶ Product allocations. The Options - Product Allocations pop-up displays.

d Review and/or modify the allocations and press PF3/15.

e Select Options ▶ Log/list/punch. The Options - Log/List/Punch Definition pop-up displays.

f   Review and/or modify the log, list, and punch defaults.

g   Type the Job statement information and press PF3/15.

h   Select Options ▶ PF keys.

i   Review and/or modify the PF key definitions. Press Enter to switch between PF keys 1 through 12 and 13 through 24. Press PF3/15 to remove the Options - PF Key Definition pop-up.

To allocate an AKR

Note:

If you have already created an AKR when validating another ESW product, skip this procedure.

1   Select File ▶ AKR Utility option to display the File - AKR Utility pop-up.

2   Enter the name of an AKR to be allocated. Type A in the command input area and press Enter to display the File - AKR Allocate/Expand pop-up.

> **Note:**
>
> The fields on the File - AKR Allocate/Expand pop-up vary depending on the settings for the installation options AKR-DSORG-VSAM and SMS in the Center installation options file.

3   On the File - AKR Allocate/Expand pop-up, verify that the AKR name is correct then enter the appropriate values for the Management Class, Storage Class, and Data Class (if you are using SMS managed datasets).

If you did not specify SMS managed datasets in the installation options file when you installed Center, the fields pertaining to SMS do not display. In that case, enter these values as required:

a   Enter the value for VOLUME where the permanent AKR is to be placed.

b   Review the Space Units and Space Amount.

c   Enter the appropriate UNIQUE parameter for the volume selected if you are allocating a VSAM AKR.

d   If this dataset needs to be cataloged under a user catalog, type C in the command input area to display the AKR Catalog Information pop-up. Enter the Catalog DSN and password as required and press PF3/15 to remove the AKR Catalog Information pop-up.

e   Enter the Job statement information for your site and submit the job by typing
       S in the command input area.

f   Wait for it to finish and then verify that the AKR was successfully allocated
       and initialized.

g   Press PF3/15 until you return to the primary Insight screen.

Figure 6 is a sample of how the File - AKR Allocate/Expand pop-up displays for a
VSAM AKR with SMS support installed.

Figure 6 • AKR Allocate/Expand Pop-up with SMS and a VSAM AKR

```
                      File - AKR Allocate/Expand
Command ===> _____

      S - Submit JCL      E - Edit JCL      C - Specify Catalog

Expand existing AKR . . . NO              (Yes or No)

AKR data set name . . . . 'VIAUSER.APPL.AKR'
  Management Class  . . . _____        (Blank for default MGMTCLAS)
  Storage Class . . . . . _____        (Blank for default STORCLAS)
   Volume  . . . . . . . _____
  Data Class  . . . . . . _____        (Blank for default DATACLAS)
    Space units . . . . . RECORDS         (Records, Tracks or Cylinders)
    Space amount  . . . . 4000            (Total AKR size in above units)
    Unique  . . . . . . . YES             (Enter NO for a VSAM data space)

Job statement information:
  //NAME    JOB (ACCOUNT),NAME,
  //         MSGCLASS=A
  //*   INSERT '/*ROUTE PRINT NODE.USER' HERE IF NEEDED.
  //*
```

To analyze the demonstration programs

1   Select File ▶ Analyze.

2   Enter the appropriate information on the File - Analyze Submit (or ESW - Prepare
       Program) pop-up.

       a   The Compile and link JCL dataset name should be:

               'ASG.VIACEN*xx*.CNTL(*member*)'

               where *member* is VIAICMP2 for COBOL II or VIAICMP3 for COBOL II
               Release 3.

       b   Set the Analyze feature Insight (or Understand for ESW) to Y. Set the other
               Analyze features to N.

       c   Enter the AKR dataset name from "To allocate an AKR" on page 11.

d   In the Analyze options field, type:

```
NORET=(ABENDPGM)
```

e   Set the COMPILE flag to N.

f   Set Link load module reusable to N.

g   Type S in the command input area to submit the job.

h   Verify that the analyze job completed successfully.

Note:

If the analyze job did not complete successfully, see the required Analyze options in the *ASG-Center Installation Guide* for additional information.

The JCL listings show these results:

For VIAIDEMO

—   condition code of 1004

—   deadcode

For VIAIDEM1

—   condition code of 1000

To validate the Analyze Submit CLIST.

1   Enter one of these commands from the ISPF Primary Menu:

—   for COBOL II:

```
TSO VIASUBDS 'ASG.VIACENxx.CNTL(VIAICMP2)'
```

—   for COBOL II Release 3:

```
TSO VIASUBDS 'ASG.VIACENxx.CNTL(VIAICMP3)'
```

2   Repeat <u>step b on page 12</u> through <u>step h on page 13</u> of <u>"To analyze the demonstration programs" on page 12</u>.

Note:

See the online help or the *ASG-Insight Reference Guide* for a description of the File - Analyze Submit pop-up.

To verify the results

1   Select File ▸ Open. The File - Open Program Request pop-up displays. Enter:

    a   Dataset name: (the AKR from <u>"To allocate an AKR" on page 11</u>)

    b   Program name: VIAIDEMO

    c   Press Enter to display the Source View screen for VIAIDEMO.

2   Select Search ▸ Data. The Search - Data Name pop-up displays. Enter these values for each field:

Field	Enter
Data name	ZIP-CODE
References	1 (All)
Indirect impact	1 (none)
Size change levels	(blank)
Direction	1 (all)
Options	(all blank)
Action	1 (Find)

Press Enter. The message `ASG0443I 8 DATA REFS, 4 DEFS, 3 USES, 1 MOD, FOUND FOR ZIP-CODE` displays.

If VIAIDEM1 was not successfully analyzed, the message `ASG0443I 9 DATA REFS, 4 DEFS, 3 USES, 2 MODS FOUND FOR ZIP-CODE` displays. If you get this message, check the output from <u>"To analyze the demonstration programs" on page 12</u>, make any necessary corrections, and resubmit the analyze job. Continue validation from the beginning of <u>"To verify the results" on page 14</u>.

3   Press PF5/17 (RFIND) repeatedly and verify these results:

    a   The message `ASG0443I 1 DATA REF FOUND FOR ZIP-CODE` displays.

    b   The message `ASG0443I 1 DATA REF FOUND FOR ZIP-CODE` displays.

    c   The message `ASG0443I 1 DATA REF: PARENT, FOUND FOR ZIP-CODE` displays.

    d   The message `BOTTOM OF DATA REACHED` displays.

    e   The message `ASG0443I 1 DATA REF: PARENT, FOUND FOR ZIP-CODE` displays.

4   Select Help ▶ Specific command. Type `FINDXTND` and press Enter. The Source View screen redisplays with the message `ASG4589I FINDXTND HIGHLIGHTS THE REQUESTED TARGETS`.

5   Press PF1/13 (HELP). Help lines for the FINDXTND command appear identified by =NOTE in position 1 through 13 of the source lines.

6   Press PF1/13 (HELP). The Help Tutorial screen for the FINDXTND command displays.

7   Press PF3/15 to exit.

8   Select View ▶ Reset.

9   On the View - Reset Request pop-up, select ALL and press Enter. The highlights are cleared and the =NOTE lines are removed.

10   Press PF10/22. The cursor is positioned on the PROCEDURE DIVISION.

11   Select Logic ▶ Data. The Logic Order Search - Data Name pop-up displays. Enter these values for each field:

Field	Enter
Data name	ZIP-CODE
Start line/label	PROCEDURE
References	1 (All)
Direction	1 (Next)
Options	(all blank)
Action	1 (show dataname references)

Press Enter. The message `4 REF(S) REACHABLE` displays. If this message does not appear, then VIAIDEM1 was not successfully analyzed.

15

12 Select Options ▶ Scratchpad ▶ Mark to display the Options - Scratchpad Mark pop-up. Enter this information:

Field	Enter
Mark name	MYNET
Target name	NETWORK
Target type	1 (Mark name)
Comments	THIS IS ZIP-CODE MODS NETWORK

Press Enter. The message NETWORK MARKED displays.

13 Select Search ▶ Mark. The Search - User Mark Name pop-up displays. Enter these values for each field:

Field	Enter
Mark name	MYNET
Direction	1 (All)
Options	(blank)
Action	1 (Find)

Press Enter. The message 107 STATEMENTS FOUND displays.

14 Select Task ▶ Modify output. The Automated Task - Modify Program Output pop-up displays. Select 1 (Begin selections) and press Enter.

   a The Modify Output Task - Output Selection pop-up displays. Select MASTER-RPT and press Enter.

   b The Modify Output Task - Statement Selection pop-up displays. Select line 000352, WRITE MAST-RPT FROM DETAIL-LINE1, and press Enter.

   c The Modify Output Task - Data Name Selection pop-up displays. Select 05 DET-LOAN-AMT and press Enter.

   d The Automated Task - Result Options pop-up displays. Select 2 (Editor) and press Enter.

e   The Options - COPY/Include Libraries pop-up displays. Verify the information and press Enter.

f   The ISPF Edit Entry screen displays. Type `ASG.VIACEN`*xx*`.CNTL` and the member name VIAIDEMO, and press Enter.

g   The ISPF EDIT (or SmartEdit) screen displays. Type `DISPLAY` in the command input area and press Enter. The message `ASGI675I 6 LINES FOUND` displays.

h   Press PF3/15 (END) twice until the Source View screen is redisplayed.

15   Select File ▸ Open. The File - Open Program Request pop-up displays.

a   Select Option 3 (Do not close program) and press Enter. The AKR Program Selection pop-up displays.

b   Type `S` in the line command area beside VIAIDEM1 and press Enter. The Source View screen for VIAIDEM1 displays.

16   Select File ▸ Close. Specify option 1 (Save any updates) and press Enter. The Source View screen for VIAIDEMO displays.

a   Select Options ▸ PF keys. The Options - PF Key Definition pop-up displays. Ensure that PF6 is set to FX %. Press PF3/15 (END) to return to the Source View screen.

b   Select File ▸ AKR utility. The File - AKR Utility pop-up displays. Press Enter to display the File - AKR Directory pop-up.

c   Type `RETURN` and press Enter. The Insight primary screen displays with the Marks being saved.

d   If you do not have IDMS, select File on the action bar and select Exit on the File pull-down to end the Insight session.

To validate IDMS support by analyzing an IDMS program

1   Select File ▸ Analyze. The Analyze Submit pop-up displays.

2   Enter the dataset name for the compile and link JCL for the IDMS program to be analyzed.

3   Enter the AKR dataset name.

4   Set the Insight analyze flag to `Y`.

5   Type S in the command input area and press Enter to submit the analyze job.

6   Verify the analyze job ran successfully.

To validate DB2 support by analyzing a DB2 program.

Note:

If you have DB2, verify that ASG.VIACEN*xx*.CNTL(VIASBIND) has been run. See the *ASG-Center Installation Guide* for more information. This installation step is required for sites having DB2. Failure to complete the DB2 installation step results in erroneous behavior by ESW products.

1   Select File ▶ Analyze to display the Analyze Submit pop-up.

2   Enter the dataset name for the compile and link JCL for the DB2 program to be analyzed.

3   Enter the AKR dataset name.

4   Set the Insight analyze flag to Y.

5   Type S in the command input area and press Enter to submit the analyze job.

6   Verify that the analyze job ran successfully.

The customization and checkout of Insight is complete.

Appendix A
Installation Checkout

Company: _____

Installer: _____

Date: _____ / _____ / _____

Step 1 - Product Test - AKR Utilities

OK	PENDING	
		Using the File - AKR Utility pop-up:
_____	_____	• Allocate a new temporary AKR
_____	_____	• Expand the new temporary AKR by typing YES in the Expand Existing AKR field on the File - AKR Allocate/Expand pop-up
_____	_____	• Delete the temporary AKR by typing this command on the command line: `TSO DELETE 'temporary.akr.dsn'`

Step 2 - Product Test - Program Analyzer

OK	PENDING	
_____	_____	**Note:** Testing the Program Analyzer entails running all variations of compile JCL. It may be necessary to obtain the JCL information from the application programmers. Use the screen, CLIST, or edit macro mechanisms to submit user's compile JCL for analysis.

Step 3 - Product Test - Miscellaneous

OK	PENDING	
_____	_____	Using the FREEMEM command, test for adequate TSO region size. Response should be a minimum of 1024K.
_____	_____	Test the PF keys by using PF5/PF17 after opening a program. The `NO PRIOR FIND` message should be displayed. If the `RFIND NOT ACTIVE` message displays, the TABLE LIBRARY (ISPTLIB DD or VIATLIB DD) has not been correctly allocated.
_____	_____	Type `KEYS` to verify that the default PF key assignments match those shown in the *ASG-Insight Reference Guide.*
_____	_____	Test the list file allocation using the command LPRINT STRUCTURE to force the list file allocation and output.
_____	_____	Test the log file allocation using the command DEBUG LOG to force the log file allocation. Follow that command with any Insight command to force output to the log file.
_____	_____	Test the log/list file job submission facility on the Options - Log/List/Punch Definition pop-up by entering Option 1 to release the log file to print, then Option 2 to release the list file to print.

The installation of Insight is now complete.

Appendix B

Insight CNTL and CLIST Members

CNTL Members

Member	Description
VIAICMP1	JCL to compile (VS COBOL) and analyze demonstration programs.
VIAICMP2	JCL to compile (COBOL II) and analyze demonstration programs.
VIAICMP3	JCL to compile (COBOL II Release 3) and analyze demonstration programs.
VIAICPY1	COBOL demonstration program copy member.
VIAIDEMO	COBOL demonstration program source.
VIAIDEM1	COBOL demonstration program source.
VIAIDEM2	COBOL demonstration program source (with COBOLII features).
VIAIDEM3	COBOL demonstration program source (with COBOLII Release 3 features).
VIAIINT	COBOL demonstration program source.
VIAIMAST	COBOL demonstration program copy member.

CLIST Members

Member	Description
INSIGHT	Invokes the Insight product from an ISPF screen.
VIAEDUSR	User exit to support source managers other than ISPF options of Librarian and Panvalet.
VIAINS	Invokes the Insight product.
VIAITEST	CLIST to establish a TSO test session with Insight.

Index

ASG Worldwide Headquarters Naples Florida USA ❙ asg.com